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**510(k) SUMMARY OF SAFETY AND EFFECTIVENESS****Trabecular Metal Knee System Augments**

**Submitter Name:** Zimmer Trabecular Metal Technology, Inc.

**Submitter Address:** 80 Commerce Drive  
Allendale, New Jersey 07401-1600

**Contact Person(s):** Marci Halevi

**Phone Number:** (201) 818-1800 ext 507

**Fax Number:** (973) 829-0825

**Date Prepared:** November 28, 2005

**Device Trade Name:** Trabecular Metal Tibial Cone Augments and Trabecular Metal Femoral Cone Augments

**Device Common Name:** Knee System Augments

**Classification Name:** Prosthesis, knee, patello/femorotibial, semi-constrained, uncemented, porous, coated, polymer/metal/polymer

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**Substantial Equivalence:** The term "substantial equivalence" as used in this 510(k) notification is limited to the definition of substantial equivalence found in the Federal Food, Drug and Cosmetic Act, as amended and as applied under 21 CFR 807, Subpart E under which a device can be marketed without premarket approval or reclassification. A determination of substantial equivalency under this notification is not intended to have any bearing whatsoever on the resolution of patent infringement suits or any other patent matters. No statements related to, or in support of substantial equivalence herein shall be construed as an admission against interest under the US Patent Laws or their application by the courts.

**Predicate Devices:** Trabecular Metal Tibial Cone Augments (K031962)  
Trabecular Metal Femoral Cone Augments (K051756),  
Trabecular Metal Knee System Augments (K040487)  
NexGen Knee System Uncemented Components (K031462).

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**510(K) Summary of Safety and Effectiveness - Continued...**

- Device Description:** The *Trabecular Metal Tibial Cone Augments and Trabecular Metal Femoral Cone Augments* are manufactured to be compatible for use with Zimmer's *NexGen Complete Knee Solution - Rotating Hinge Knee (RHK) System* and Zimmer's *NexGen Complete Knee Solution - Legacy Knee Constrained Condylar Knee (LCCK) System*. When used with the *RHK System*, the Trabecular Metal Cone Augments are for cemented use only. When used with the *LCCK System*, the Trabecular Metal Augments are for either cementless or cemented use.
- Intended Use:** *Trabecular Metal Tibial Cone Augments and Trabecular Metal Femoral Cone Augments* are intended for use where severe degeneration, trauma, or other pathology of the knee joint indicates total knee arthroplasty. When used with the *NexGen Complete Knee Solution - Rotating Hinge Knee (RHK) System*, the *Trabecular Metal Tibial Cone Augments and Trabecular Metal Femoral Cone Augments* are for cemented use only. When used with the *NexGen Complete Knee Solution - Legacy Constrained Condylar Knee System*, the *Trabecular Metal Tibial Cone Augments and Trabecular Metal Femoral Cone Augments* are for cementless or cemented use.
- Performance Data:** The predicate and subject devices are identical; performance characteristics therefore remain as documented in the predicate submission (K031962 and K051756).



**DEPARTMENT OF HEALTH & HUMAN SERVICES**

**Public Health Service**

**Food and Drug Administration  
9200 Corporate Boulevard  
Rockville MD 20850**

**FEB 27 2006**

Zimmer Trabecular Metal Technology, Inc.  
c/o Ms. Marci Halevi  
Manager of Regulatory Affairs  
80 Commerce Drive  
Allendale, New Jersey 07401-1600

Re: K053340

Trade/Device Name: Trabecular Metal Tibial Cone Augments and Trabecular Metal  
Femoral Cone Augments

Regulation Number: 21 CFR 888.3565 and 21 CFR 888.3560

Regulation Name: Knee joint patellofemorotibial metal/polymer porous-coated uncemented  
prosthesis, Knee joint patellofemorotibial polymer/metal/polymer semi-  
constrained cemented prosthesis

Regulatory Class: II

Product Code: MBH, JWH

Dated: November 30, 2005

Received: December 1, 2005

Dear Ms. Halevi:

We have reviewed your Section 510(k) premarket notification of intent to market the device referenced above and have determined the device is substantially equivalent (for the indications for use stated in the enclosure) to legally marketed predicate devices marketed in interstate commerce prior to May 28, 1976, the enactment date of the Medical Device Amendments, or to devices that have been reclassified in accordance with the provisions of the Federal Food, Drug, and Cosmetic Act (Act) that do not require approval of a premarket approval application (PMA). You may, therefore, market the device, subject to the general controls provisions of the Act. The general controls provisions of the Act include requirements for annual registration, listing of devices, good manufacturing practice, labeling, and prohibitions against misbranding and adulteration.

If your device is classified (see above) into either class II (Special Controls) or class III (PMA), it may be subject to such additional controls. Existing major regulations affecting your device can be found in the Code of Federal Regulations, Title 21, Parts 800 to 898. In addition, FDA may publish further announcements concerning your device in the Federal Register.

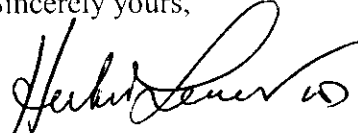

Please be advised that FDA's issuance of a substantial equivalence determination does not mean that FDA has made a determination that your device complies with other requirements of the Act or any Federal statutes and regulations administered by other Federal agencies. You must comply with all the Act's requirements, including, but not limited to: registration and listing (21 CFR Part 807); labeling (21 CFR Part 801); good manufacturing practice requirements as set

forth in the quality systems (QS) regulation (21 CFR Part 820); and if applicable, the electronic product radiation control provisions (Sections 531-542 of the Act); 21 CFR 1000-1050.

This letter will allow you to begin marketing your device as described in your Section 510(k) premarket notification. The FDA finding of substantial equivalence of your device to a legally marketed predicate device results in a classification for your device and thus, permits your device to proceed to the market.

If you desire specific advice for your device on our labeling regulation (21 CFR Part 801), please contact the Office of Compliance at (240) 276-0120. Also, please note the regulation entitled, "Misbranding by reference to premarket notification" (21CFR Part 807.97). You may obtain other general information on your responsibilities under the Act from the Division of Small Manufacturers, International and Consumer Assistance at its toll-free number (800) 638-2041 or (301) 443-6597 or at its Internet address <http://www.fda.gov/cdrh/industry/support/index.html>.

Sincerely yours,

Mark N. Melkerson, M.S.  
Acting Director  
Division of General, Restorative and  
Neurological Devices  
Office of Device Evaluation  
Center for Devices and  
Radiological Health

Enclosure

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## Indications for Use

510(k) Number (if known): K053340Device Name: **Trabecular Metal Tibial Cone Augments and Trabecular Metal Femoral Cone Augments**

## Indications for Use:

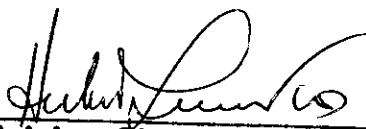
*Trabecular Metal Tibial Cone Augments and Trabecular Metal Femoral Cone Augments* are intended for use where severe degeneration, trauma, or other pathology of the knee joint indicates total knee arthroplasty. When used with the *NexGen Complete Knee Solution – Rotating Hinge Knee (RHK) System*, the *Trabecular Metal Tibial Cone Augments and Trabecular Metal Femoral Cone Augments* are for cemented use only. When used with the *NexGen Complete Knee Solution – Legacy Constrained Condylar Knee System*, the *Trabecular Metal Tibial Cone Augments and Trabecular Metal Femoral Cone Augments* are for cementless or cemented use.

Prescription Use ☒  
(Part 21 CFR 801 Subpart D)

AND/OR

Over-The-Counter Use \_\_\_\_\_  
(21 CFR 801 Subpart C)(PLEASE DO NOT WRITE BELOW THIS LINE-CONTINUE ON ANOTHER PAGE OF  
NEEDED)

Concurrence of CDRH, Office of Device Evaluation (ODE)

  
(Division Sign-Off)  
**Division of General, Restorative,  
and Neurological Devices**

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(Posted November 13, 2005) 510(k) Number \_\_\_\_\_